



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/724,605

12/02/2003

Masaki Tokioka

03500.017806

3712

5514

7590

07/21/2008

FITZPATRICK CELLA HARPER & SCINTO  
30 ROCKEFELLER PLAZA  
NEW YORK, NY 10112

EXAMINER

TOLIN, MICHAEL A

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

07/21/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/724,605	<b>Applicant(s)</b> TOKIOKA ET AL.	
	<b>Examiner</b> MICHAEL A. TOLIN	<b>Art Unit</b> 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 28 and 30-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 28 and 30-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 28 and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada (WO 01/54161 A1, referencing US 2002/0180342 as an English language equivalent) in view of Vrijssen (US 4710673) and Hochuli (US 3777281).

Yamada teaches a method of manufacturing an image display apparatus having display devices and an airtight container containing the display devices comprising a step of bonding a substrate and a frame to form the container using a low melting point metal seal bonding material (Abstract; Figures 1-21; paragraphs 18, 19, 35, 100 and 101). Yamada performs the bonding by applying the seal bonding material to one of the contacting surfaces, applying heat, and bringing the surfaces together (paragraphs 100 and 101). In contrast, the claimed method involves contacting the substrate with the frame to form a contacting region and then placing the seal bonding material along the contacting region wherein seal bonding material is not placed on opposing surfaces of the substrate in the frame. However it is generally known to achieve suitable sealing and bonding using a low melting point metal in the claimed manner. For example,

Art Unit: 1791

Vrijssen achieves sealing and bonding in the claimed manner with the advantage of using local heating to reduce exposure of the substrates to heat (Abstract; Figures 1-3; column 1, line 64-66; column 2, lines 34-59; column 4, lines 4-29). Hochuli explains that sealing and bonding in the claimed manner provides extremely thin and stable seals (Abstract; Figures 1-4; column 1, lines 5-11 and lines 34-39; column 2, lines 3-5 and lines 11-38). It is also clear from Hochuli's preferred embodiments shown in the figures that placing the sealing material on side surfaces is a recognized alternative to achieving sealing by placing the sealing material on opposing surfaces. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the claimed steps of contacting, placing, and heating because one of ordinary skill in the art would have been motivated to achieve the bonding and sealing of Yamada in any known suitable manner such as that suggested by Vrijssen and Hochuli and because one of ordinary skill in the art would have been motivated to achieve the advantages of localized heating in accordance with the teachings of Vrijssen.

As to achieving bonding with material introduced between the opposing surfaces as well as material which is not between the opposing surfaces, such is considered obvious for the following reasons. The primary reference to Yamada provides bonding and sealing material between opposed surfaces. Vrijssen suggests providing material on surfaces which are not opposed. Hochuli suggests providing material on both opposed surfaces as well as surfaces which are not opposed (Figure 4; column 2, lines 25-38). Thus selection from among these known methods for achieving suitable sealing and bonding involves no more than routine experimentation for one having ordinary skill

Art Unit: 1791

in the art. Furthermore, one of ordinary skill in the art would have readily appreciated that increasing the amount of sealing material to achieve bonding on opposed as well as non-opposed surfaces would be expected to increase the bond strength since more surfaces are bonded. It would have been obvious to one of ordinary skill in the art at the time of the invention to achieve the bonding in the claimed manner because one of ordinary skill in the art would have been motivated to select from among known suitable methods of achieving sealing and bonding as a matter of routine experimentation or because one of ordinary skill in the art would have been motivated to achieve increased bond strength by adhering a greater surface area.

Regarding claim 30 Yamada teaches bonding in a vacuum in order to avoid the necessity of subsequent evacuation (paragraphs 18, 19 and 25).

Regarding claim 31, Yamada provides the claimed material of good wettability for controlling the flow of the sealing material (paragraphs 35, 38, 133 and 139).

Claim 32 is satisfied for the reasons provided above.

### ***Response to Arguments***

3. Applicant's arguments with respect to claim 28 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). The new language added to independent claim 28 required further search and consideration and resulted in the above new grounds of rejection.

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL A. TOLIN whose telephone number is (571)272-8633. The examiner can normally be reached on M-F 9am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

Art Unit: 1791

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael A Tolin/  
Examiner, Art Unit 1791

/Richard Crispino/  
Supervisory Patent Examiner, Art Unit 1791